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# Worldwide Report

EPIDEMIOLOGY

No. 220



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## WORLDWIDE REPORT

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## ARGENTINA

### BRIEFS

TYPHOID FEVER--Health officials are very much concerned over an outburst of typhoid fever among children in Chaco Province due to the heavy rains and flooding affecting the province. [Buenos Aires CRONICA in Spanish 6 Feb 81 p 11 PY]

HEPATITIS OUTBREAK--Cordoba, 18 Feb (NA)--Approximately 20 persons are affected by an outbreak of hepatitis in the town of Las Varas, 190 km away from Cordoba. Provincial health spokesman have stated that the disease, which may have been transmitted through drinking water, is now completely under control. [Buenos Aires NOTICIAS ARGENTINAS in Spanish 1437 GMT 18 Feb 81 PY]

CSO: 5400

## STATES MAY UNITE TO RESIST FEDERAL HEALTH FUND CUTS

Sydney THE SYDNEY MORNING HERALD in English 14 Jan 81 p 3

[Article by Gregory Turnbull, Medical Reporter]

[Text] The NSW Minister for Health, Mr. Stewart, has called a special meeting of State ministers to form a united front against Federal Government moves to cut hospital funds.

The meeting has the support of all the States.

The ministers will meet in Sydney on Friday to discuss the controversial Jamison report on hospitals, which has recommended that the hospital cost-sharing agreement between the Federal and State Governments be abolished.

Under the present agreement, the Federal Government is committed to pay about \$500 million a year towards the net operating cost of NSW hospitals.

The Commission of Inquiry into the Efficiency and Administration of Hospitals, headed by the retired Sydney accountant Mr James Jamison, has recommended that the agreements be replaced by block grants based on population.

The proposal, if accepted by the Federal Government, will make hospital funding a further debating point at Premiers' Conferences, and sharply reduce the Federal Government's responsibility for hospital services.

An annual meeting of all health ministers, including the Federal Minister, will be held in Perth in March.

It is understood that Friday's special meeting was called because of fears that the Federal Government will act swiftly on the Jamison report so that any changes can be made before July, when the Fraser Government may face a hostile Senate.

Mr Stewart is understood to be concerned that the end of the cost-sharing agreement could be disastrous for the NSW hospital system.

The Jamison report said that if all States had achieved in 1978-79 the same average hospital bed costs per day as Queensland, and the same average bed use as Victoria, total hospital costs would have been reduced by \$964 million, or nearly a third.

The Jamison Commission challenged the State and Federal Governments to achieve such savings.

The commission recommended that the block grants include funds for community health and dental services, and State Government nursing homes and psychiatric hospitals.

The grants are to be made on the condition that the State Governments agree not to increase their total number of hospital beds during an initial funding period to June, 1985.

For NSW, this may be particularly unwelcome. A Federal Government freeze on hospital growth from June, 1979, pending the Jamison report, has already led to a major rationalisation of hospital bed numbers in NSW, including the closure of 870 beds in major Sydney hospitals.



## INOCULATION RATES IN WEST AUSTRALIA GOING DOWN

Perth THE WEST AUSTRALIAN in English 6 Jan 81 p 12

[Text] It was possible to keep infectious diseases under control if at least 80 per cent of the community was vaccinated against them, a Health and Medical Services Department spokesman said yesterday.

Once the figure dropped below 80 per cent there was a danger that an epidemic of an infectious disease could occur.

For the past few years WA had maintained about 80 per cent immunisation cover, but figures indicated a fall in vaccination rates for 1980.

In 1978, 46,638 injections to counter tetanus, diphtheria and tetanus, tetanus toxoid, measles and rubella were given.

Although the exact figure for 1980 was not yet known, it was expected to be about 45,000.

### Trend

The figures did not include local government vaccination programmes or vaccinations undertaken by private doctors, but they did indicate a trend.

The spokesman was commenting on the reasons for the State Government's campaign to encourage people to be vaccinated against infectious diseases.

It is mounting the campaign in support of the International Year of Disabled Persons, because immunisation is a preventive measure against disablement.

### Rubella

The spokesman said that the Year 8 schoolgirls' rubella vaccination programme was being well maintained.

Rubella if contracted early in pregnancy, can cause conditions affecting sight, hearing, the heart and other organs in the foetus.

The spokesman said that many adult women in the child-bearing years had not been immunised.

Some doctors routinely checked for antibodies against rubella in a woman's blood during a pregnancy. If there were none, they offered rubella vaccination on the day after childbirth to protect the foetus in any future pregnancies.

CSO: 5400

## BERMUDA

### BRIEFS

FLU VACCINE SHORTAGE--Bermuda is caught up in a flu epidemic and according to Dr John Gourlay, Chief Medical Officer, it is severe this year. "Judging by the reports we have received, it seems to be quite severe," he said. "We had vaccine, but due to the demand, we are running very short of it," he said. "The supply is now quite limited." "Last week alone," he said, "we listed 277 people as having the flu and the week before that, 180. And these are just the numbers that have been reported." Dr Gourlay feels that the flu in Bermuda has reached a peak and will be subsiding in a week or two. "I have spoken to people in the U.S.," he said, "and they are experiencing it also." [Text] [Hamilton THE ROYAL GAZETTE in English 16 Jan 81 p 1]

CS0: 5400

BOLIVIA

BRIEFS

YELLOW FEVER CAMPAIGN--The campaign to control yellow fever in the capital of Santa Cruz has been resumed. Twenty-three vaccination posts have been set up throughout the city and fumigation is being used to fight the disease-carrying mosquitoes. [La Paz PRESENCIA in Spanish 12 Feb 81 p 2 PY]

CSO: 5400

HEALTH CENTER REASSURES RESIDENTS ABOUT HEPATITIS

Rio de Janeiro O GLOBO in Portuguese 22 Jan 81 p 9

[Text] Renato Abi-Ramia, director of Novo Friburgo Health Center, said that he is not worried about the "slight increase in the number of cases of hepatitis in the city," even though the number has increased appreciably in the last few days, according to information furnished by laboratories specializing in clinical and bacteriological analyses. He said that there is no reason to alarm the people, "since the disease is endemic, that is, it occurs throughout the year without becoming an epidemic."

Abi-Ramia deplores "the lack of concern by doctors, clinics and laboratories."

"They do not make a regular check of the cases which are occurring; if they did so, we would be able, through bacteriological analyses, to determine the origin of the disease with a good margin of safety," he said.

The health center director further stated that he has constantly asked the various clinics and analysts to notify him of this type of disease but that his request is rarely heeded.

"Unless the number of cases tends to increase, as is presently occurring, for example, when INAMPS [National Institute for Social Security Medical Assistance] sent us five notifications at one time, whereby we are able to deduce that there are still more cases not acknowledged," he said.

Certain local laboratories confirm what Dr Abi-Ramia has said relative to the endemic existence of hepatitis but pointed out that from December 1980 on their analyses have shown an increase in the incidence of the disease which is now reaching "a level well above the average."

Mario Haiutti, health coordinator of the Serrano area, said that the people must be alerted to seek a doctor as soon as the first symptoms of hepatitis appear, such as fever, vomiting, discomfort, stomach ache and excessive fatigue.

As for the quality of the water the city receives, Jose Dolorico, director of Autonomous Water and Sewer Service (SAAE), gave his assurance that the control of the water treatment "had been doubled inasmuch as the quantity of chemical products used in the purification and cleaning is always increased during hard rains to offset the greater probability of harmful infiltrations in the supply system but that, at present, the possibilities of contamination are at a minimum."

8568

CSO: 5400

## DIPHThERIA DEATH REPORTED IN PARANA

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 15 Jan 81 p 13

[Text] Curitiba--Only by chance, the Parana Secretariat of Health discovered a case of diphtheria, a highly contagious disease, which killed a 9-year-old child last week in Shangri-la, one of the populous spas on the state's seacoast. Yesterday, the secretariat issued a proclamation advising that all necessary preventive measures had been taken to keep the disease from spreading, although there is still apprehension among the doctors of the shore area that the intense conglomeration of bathers at this time of the year might serve as a fertile environment for the spread of contagious diseases such as diphtheria.

Ari Wambler, medical director of Nosso Senhor dos Navegantes Hospital in Matinhos, another populous spa on the Parana seashore, denied the possibility that the child afflicted with diphtheria in Shangri-la would lead to an outbreak of the disease, saying that "this is an isolated case among a group of residents living on the coast." Although recognizing that the case involving the child was reported in time for the Secretariat of Health to take all necessary preventive measures, he admits that the concentration of more than 200,000 people on the state's seashore on weekends creates an environment which is highly unfavorable healthwise. He went on to say that reports are coming in from the seaside resorts of a large number of cases of influenza, tonsillitis, ear infection, and dehydration from food poisoning being experienced by individuals who "buy foods sold on the beach and not subject to any hygienic controls."

The Secretariat of Health advises that, although it was not possible to make a bacteriological examination of the victim, the rest of the children of the same family were given the necessary test and the results were negative.

Up to now, hundreds of Shangri-la residents have been vaccinated against diphtheria, including the pupils of the school the dead child attended. According to the secretariat, the prophylactic circle of the disease has been closed, "and there is, therefore, no cause for alarm."

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CSO: 5400

## BRIEFS

**SÃO PAULO MEASLES EPIDEMIC**--Bauru, São Paulo--Pharmacist Gilberto Ferrite Pereira of Queiroz, a city in the interior of São Paulo, disclosed that for 40 days he has been treating dozens of children and adults afflicted by a measles epidemic. The city has 3,200 residents but no doctor or hospital. Ferrite said there is only one health center operating in the city, with four employees and one doctor who comes there twice per week. "As a result of the epidemic," he added, "12 persons have already been hospitalized in Santa Casa de Getulina, a city closeby. I am worried about this, as most of the patients are poor and this disease has aftereffects if not properly treated." The pharmacist has treated 65 people since the beginning of the epidemic and finds it strange that the health center has not yet alerted the state authorities about the seriousness of the situation. Ferrite argued that patients need isolation but that, since they are being treated at home, this is not possible, and the spread of the disease is even being facilitated. The health center was closed yesterday, and its chief administrator, Dr Aldacir Roberto Lopes Pereira da Silva, who resides in Tupa, cannot be found, even at his home. [Text] [Rio de Janeiro O GLOBO in Portuguese 18 Jan 81 p 7] 8568

**MEASLES OUTBREAK IN URUGUAIANA**--An outbreak of measles in Uruguaiana, 645 km from Porto Alegre, has already killed four children in the age group up to 4, according to a survey made by the Secretariat of Health in Rio Grande do Sul. Rosa Maria Cardoso, coordinator of the secretariat's immunization program, disclosed that the deaths occurred from bronchopulmonary complications caused by measles. Uruguaiana, on the Argentine border, has the lowest rate of vaccinated children--about 50 percent--whereas it is believed that, to have immunity, at least 90 percent of the children must be vaccinated. [Text] [São Paulo O ESTADO DE SÃO PAULO in Portuguese 20 Jan 81 p 12] 8568

**INFANT MORTALITY DATA**--In the past year, about 310,000 children out of 3.3 million births have died; 2.1 million of these were delivered by INAMPS [National Institute for Social Security Medical Assistance]. This disclosure was made by Minister Jair Soares and is recorded in a document entitled "A Realistic View of Social Security," which contains a balance sheet of the principal activities carried out by that organization in 1980. In that publication the minister emphasizes that excessive migration to urban areas in the 1960-1970 period--a trend which continued noticeably in the past decade--could only be restricted with the implementation of basic care for the rural resident in addition to the gradual valorization of primary production. In the southeastern area, migration from the country to the city increased from 73 to 81 percent; in the south, from 44 to 51 percent; and in the northeast, from 42 to 47 percent, thus overloading "the urban-center structure and increasing its marginal coverage," according to Jair Soares. The document went on to say that during the 1960-1970 decade the country's population increased 2.89 percent per year, representing a decrease from the previous decade (3 percent), while the urban population increased 5.22 percent per year. [Text] [São Paulo O ESTADO DE SÃO PAULO in Portuguese 7 Jan 81 p 11] 8568

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## COSTA RICA

### BRIEFS

**FEWER MALARIA CASES**--The Health Ministry has reported that Costa Rica has the lowest index of malaria cases in Central America. Health director Leonardo Maranghello has noted that according to studies carried out, in 1980 there were 77,000 cases in El Salvador, 69,000 in Guatemala, 25,000 in Honduras and 18,000 in Nicaragua. Costa Rica had only 364 malaria cases. [PA310434 Panama City ACAN in Spanish 0115 GMT 20 Jan 81 PA]

CSO: 5400



# FOX SPREADS RABIES; COUNTERMEASURES INEFFECTIVE

Paris LE FIGARO in French 21 Jan 81 p 12

[Article by Irina de Chikoff: "Watch Out! Rabies..."]

[Text] Rabies is advancing inexorably in France. Spread by the fox, which is the principal reservoir and carrier of the rabies virus, it is advancing at an average rate of 30 to 40 km per year. All preventive measures set up 12 years ago have brought only very poor results for the time being. The advancing epizootic reached the Atlantic in 1980, leaving behind it a chronic and static situation. Live with rabies? In the occupied zone they are used to it. In the free zone it is scarcely thinkable. On the front itself, fear and lack of concern alternate at the same rate as the incidence.

In 1927 the last centers of what was called "street rabies" were disappearing. On 28 March 1968, after having traversed part of Europe, "forest rabies" penetrated into France at Montenach (Moselle).

Vulpine rabies had lain dormant for a very long time in an endemic state in the frozen North. But during the 1930's it appeared in Poland. Under cover of World War II it began to travel toward the West. Denmark, Germany, Austria, Luxembourg, Belgium and Switzerland were affected successively.

France, in turn, was invaded. During 1968, 3 departments were to be contaminated, then 5, 6, 8 and today, 30. Antirabies centers opened at the same rate as the geographic progression of the disease all over the place. At present there are 40 in France, headed, on one hand, by the Pasteur Institute of Paris and, on the other hand, by the Nancy Center for Rabies Studies.

About rabies and the fox, everything, or practically everything, is known at Nancy. Fortnight by fortnight the enemy's advance is followed on the headquarters maps. "The fox," Professor Blancou explains, "travels primarily in the fall. That is the time when the fox cubs which have become adults are chased out of the family den and must leave in search of their own hunting territory." Every year the contaminated zone is extended, for despite the foxes which fall victim to rabies (50 percent), the vulpine population remains stable. It is estimated at roughly



one fox per square km. "That is too many," says Professor Blancou. "The foxes have proliferated because they are hunted less, because food is abundant and because their competitors for food (predators) have disappeared. The fox has become the king of the forests. But wherever there is overpopulation there is epidemic; this is a biological law. All the experts agree: reduction of the fox population is a matter of urgency."

The public authorities have encouraged hunting by offering a bounty which varies from Fr 40 to 70, depending on the department, for "the tail of a fox." Chloropicrin was distributed free of charge to gamekeepers for gassing dens in the spring when the entire family is in the lair. The ecologists and their friends complained loudly of holocaust. But it should indeed be noted that in the departments where gassing has been seriously practiced rabies, although not disappearing, has retreated. Today a new method has been perfected: gassing with prussic acid. The foxes die instantaneously without suffering. But the acid requires specialized teams and adequate material; these are expensive.

Other measures: vaccination and sterilization of foxes by bait. Some 10 years ago two vaccines which were effective and without danger to foxes were discovered. But 5 years later there has been some disillusionment because these vaccines are dangerous to other animal species. According to Professor Blancou, "self-service virus vaccine in nature is a gamble. An unknown danger, the possible propagation of a 'laboratory' rabies among wild animals, would be substituted for a known danger, vulpine rabies," he said.

The only solution is and remains not the systematic destruction of foxes, which have their place in the balance of nature, but reduction of them. Too often considered fox-slaughterers, the scientists of the Nancy Center for Rabies Studies are a little tired of this bad faith, but they nonetheless have no intention of giving up on recommending what is necessary.

Earlier, in Reims, at the antirabies center of the regional hospital, Doctor Strady, trained at Pasteur, confirmed this. "Rabies is advancing like a forest fire," he says, "it is advancing but behind it the fire smoulders and suddenly breaks out, followed by a period of false calm. This is why it is important to reduce the vulpine population."

For him the "friends of nature" are a good 20 years late in accusing the epidemiologists of wanting to "slaughter the foxes." Shooting or gassing are no crueler predators than were the wolves, lynxes, bears or eagles.

The reintroduction of the lynx in the affected zones is one of the dreams the "friends of nature" cherish. For Professor Sureau, who heads the Antirabies Center of the Pasteur Institute in Paris, this dream verges on the absurd: "Imagine," he says, "a rabid lynx in the countryside."

Maps, files and documents pile up in Professor Sureau's office. He lists figures: between 28 March 1968 and 30 November 1980, 18,462 cases of animal rabies were recorded. Statistically there is thought to be one case of human rabies per 10,000 cases of animal rabies. The danger point has thus been far exceeded.

Among these 18,462 cases are 14,428 foxes, 1,737 cattle, 630 cats, 455 sheep, 445 dogs, roe deer, horses and still other species. Thanks to the sanitary regulations and the vaccines, rabies has remained confined to the forests up to now. It would almost be possible to put up with it if the danger were not at the gates of the cities. At the recent Bichat talks 500,000 bites annually were mentioned. Professor Sureau's service receives 2,000 bitten persons per year on the average. Five hundred of them are treated for rabies, either because the biting animal was not caught and his aggressiveness was suspect, or because the animal caught was in fact rabid.

In Switzerland, Austria, Poland and Yugoslavia there were eight cases of human rabies between 1977 and 1979. Eight fatal cases because rabies is still incurable if it is not treated in time. "In France," says Professor Sureau, "while an epidemic has been ruled out, we remain at the mercy of an accident due here and there to negligence."

He mentioned the case of a man who claims to have been bitten in Val-d'Oise by an unknown dog but who put off his visit to the Pasteur Institute for 3 weeks. "It's got to be one of two things: either there was nothing wrong with the dog or else it is perhaps already too late."

An optimist? Professor Sureau is scarcely that. By reducing the fox population it would be possible to stem the progression of rabies. As for getting rid of it.

9380

CSO: 5400

# WATER TREATMENT TO BE UPGRADED IN SEVERAL AREAS

Georgetown GUYANA CHRONICLE in English 10 Jan 81 p 1

[Text]

**1101** Bartica and Rupununi residents will no longer have to use untreated water from the nearby rivers when wells being sunk in those areas are completed in June of this year.

The overall project which includes the rehabilitation of some seven water treatment plants stretching from Eccles on the East Bank of Demerara to Caledonia and from Better Hope to Friendship on the East Coast, will cost an estimated \$3.1 million. Out of that sum Guyana Water Authority is providing a little more than \$1m. The remainder comes from international lending agencies.

In addition Guywa has also disclosed that water treatment plants will be set up at Linden by the end of this year. The Mining Town, headquarters of the Guyana Mining Enterprises is the source from which ingredients like alum used in the purification and colouration of water is supplied.

Government recently banned the importation of those ingredients and it has saved the country thousands of dollars in foreign exchange.

The areas in question will also have a more improved water supply and distribution system. This would be due largely to additional lengths of pipes being installed to take water into the homes.

For Bartica Guywa will erect a well capable of supplying one million gallons of water a day. And for the vast Rupununi region 12 wells are to be sunk to satisfy the needs there.

While Guywa will spend a significant portion of its budget on the rehabilitation of the plants, the Guyana Consumers' Association, the consuming public, and various local authorities that govern those districts, will greatly welcome the move by Guywa. The public in particular has been harsh in its criticism over frequent breakdowns of wells and has sometimes questioned its ability to supply pure water and upkeep the wells.

During early December the Eccles, Covent Garden and Friendship plants collapsed. Those supplied by Covent Garden and Friendship got back theirs in a matter of hours, but took Guywa engineers nearly a month to restore supplies to Eccles.

## SHORTCOMINGS IN LEPROSY CONTROL SCORED

Madras THE HINDU in English 30 Jan 81 p 8

[Editorial]

[Text] Even after three decades of launching a national control programme, leprosy continues to be a major public health problem. The seminar held in North Bihar, in which some of the leading leprologists participated, has brought into sharp focus the crucial deficiencies halting the progress in the eradication of this disease. There has so far been no comprehensive survey of all endemic areas to quantify its incidence; it is only a rough estimate that there are 3.2 million persons who need attention. An encouraging aspect is that only 25 per cent of the cases are infectious, which means that through early detection and prompt treatment there is every chance of giving a new life to the leprosy patients. Due to the social stigma attached to leprosy and certain wrong notions about it, those who know they are suffering from leprosy do not come out in the open for undergoing treatment. It is here that a sustained campaign about the real nature of this ailment, emphasising the fact that leprosy can be cured, should be undertaken by persons trained for the purpose. When once the many misgivings and unfounded fears that go with leprosy are removed, the process of detection and cure can be stepped up. It is somewhat disconcerting that this aspect of the problem has received scant attention.

The Union Health Ministry only recently announced that a crash programme will be launched to combat and eliminate leprosy. Its success, however, depends on the availability of drugs which, according to leprosy experts, are in short supply. While the annual requirement, for instance, of dapsone which is an inexpensive but fairly effective drug is 35 tonnes, less than half that quantity is produced in the country. With intermittent supply of essential medicines, regular treatment is bound to be hampered. This is one very vital aspect of the control programme which should be looked into quickly. [as published] Experts have also expressed the view that patients have shown resistance to the traditional drugs that are in use. This requires a fuller probe so that the more potent drugs available abroad can be imported in the required quantities. The All India Institute of Medical Sciences is working on a vaccine to build immunity against leprosy, and if this effort succeeds a major breakthrough will have been achieved. It is equally important to strengthen the infrastructure of the control programme, especially the medical personnel. Unfortunately, leprosy as a subject of study in the academic curriculum has not received the importance it ought to have, and this is partially responsible for the paucity of personnel trained to handle even known cases. The

initiative to correct this deficiency must come from the leprologists themselves. All this apart, there is a clear case for streamlining the administration of funds allotted for the eradication schemes by restoring the system under which the national control programme was totally Central-aided, since experience has shown that the States have failed in most cases to come forward with the 50 per cent matching grants expected of them.

CSO: 5400

## BIOCHEMIST REPORTS ON ANTILEPROSY VACCINES

Calcutta THE STATESMAN in English 21 Jan 81 p 9

[Text] New Delhi, Jan. 20.--Encouraging results have been obtained with two types of anti-leprosy vaccines under development at the All-India Institute of Medical Sciences here, reports PTI. Professor G. P. Talwar, chief biochemist at AIIMS, said a technique has also been developed to detect potential leprosy patients for whom the vaccines would be beneficial.

Mr Talwar recently told a meeting of scientists at the Indian Council of Medical Research that trials have shown the vaccines' ability to improve the immunity to leprosy.

The vaccines were tried at three different centres--Chingleput (Tamil Nadu), Agra and Delhi--on some 60 leprosy patients and their contacts.

A high percentage of patients who were "lepromin negative" became "lopromin positive" at the end of the trial, indicating that the vaccines were able to build up the defence system of the patients. [as published]

Mr Talwar said that one vaccine was made from "modified" *Leprae* (the germ that causes leprosy), and the other vaccine from "*Mycobacterium Delhi*", an organism that Mr Talwar and his team isolated from the soil a few years ago. He, however, cautioned that "further investigations are needed for confirming the protective potential of the vaccines".

Apart from the anti-leprosy vaccine, Mr Talwar's group has developed a technique for diagnosing person infected with the leprosy germ but not revealing the disease.

It is for such persons that the vaccines are needed. According to Mr Talwar, "it will become possible to develop low-cost diagnostic kits" to identify such persons.

Besides the two vaccines under development at AIIMS, the Cancer Research Centre in Bombay has tested a third vaccine made from ICRC bacillus. This vaccine, tried on 22 patients was also claimed to be "encouraging".

CSO: 5400

## BRIEFS

FORUM ON LEPROSY--Bombay, Feb 5 (PTI)--The Indian scientists were developing relatively inexpensive multi-drug regimens for mass application to combat leprosy, Dr V Ramalingaswamy, Director General, Indian Council of Medical Research (ICMR) said here today. Inaugurating the international symposium on mycobacterium leprae, organised by the Association of Microbiologists of India and the foundation for medical research, he said that ICMR had extensive plans for a co-ordinated national programme of research into various aspects of leprosy. A reference laboratory for mycobacteria would soon be established as part of the programme, Dr Ramalingaswamy said. He said an estimated 3.2 million persons in India were believed to be suffering from "overtly manifest clinical" leprosy, the largest number of persons afflicted with the disease in any single country in the world. During the two-day symposium, attended by a number of foreign researchers, 20 scientists are expected to present their papers. [Text] [New Delhi PATRIOT in English 6 Feb 81 p 5]

CSO: 5400

## BRIEFS

RECRUDESCENCE OF MALARIA--The ministry of Health is preparing for a recrudescence of malaria by beefing up its preventive division and increasing its stores of equipment and pesticides. WHO epidemiologist R. Giri says incidence of malaria in Mauritius this year could be great. The ministry which was caught off guard by Cyclone Claudette is determined to be ready this time. May is particularly favorable for malaria due to the heavy rains. This year reported cases of malaria has been on a constant rise due to the abundant rains of 1979 and the cyclones of 1979-80. Between January and August 1980 there were 402 reported cases. Of these 381 were considered indigenous and concentrated in Triolet, Flic-en-Flac, Pamplemousses and Flacq. With the warm season the situation could deteriorate further. [Port Louis LE MAURICIEN in French 26 Jan 81 p 5]

CSO: 5400



## MOZAMBIQUE

### BRIEFS

CHOLERA VICTIMS--Johannesburg--Radio Mozambique has announced that at least 120 people have died and 188 are in a serious condition in hospital as a result of the cholera outbreak in Mozambique. About 3 000 people have reported to Beira's hospital with symptoms of the disease since it broke out late last year. According to the broadcast a mass vaccination is being carried out in Beira as the disease continues to spread. About 70 000 people have already been vaccinated. The broadcast said the situation was causing deep concern. [Text] [Salisbury THE HERALD in English 12 Feb 81 p 2]

CHOLERA CONTROL--The national director for preventive medicine, Jorge Cabral, disclosed in Maputo today that the outbreak of cholera which has hit some areas of the provinces of Maputo, Sofala and Nampula was practically under control. At a press conference, Jorge Cabral explained that in Nampula the cholera outbreak was present in the district of Momba where only one case was registered so far. During the press conference, the national director for preventive medicine called upon the population to adhere to vaccinations and take more care about the conditions of their food, water and personal hygiene. [Text] [LD190608 Maputo Domestic Service in Portuguese 1400 GMT 18 Feb 81]

CSO: 5400

## NICARAGUA

### BRIEFS

POLIO VACCINATION--There will be mass vaccination against poliomyelitis in Chinandega on Sunday. Several health centers will be installed in the various neighborhoods. Two cases have been reported recently in that city. [Managua Radio Sandino in Spanish 1800 GMT 12 Feb 81 PA]

CSO: 5400

## BRIEFS

**MENINGITIS VACCINATIONS**--A report from Minna, says over 19,000 people have been vaccinated against cerebral-spinal meningitis in the Bako local government area of Niger state. The area health superintendent, Mallam (Issaka Akali Agayi) who made this known added that similar exercises would soon be carried out in other local government areas. He appealed to the people to cooperate with the health officials in order to ensure the success of the exercise. Mallam (Akali) urged them to report the outbreak of any epidemic to the nearest hospital or clinic. [Text] [Lagos Domestic Service in English 0600 GMT 17 Feb 81]

CSO: 5400

## BRIEFS

REPORT ON LEPROSY CASES--Metro Manila has the most leprosy patients, leading nine provinces in the country where this disease was found to be prevalent. Health Minister Enrique Garcia, in a press conference yesterday in connection with the nationwide observance of Leprosy Control Week on Feb. 22-28, said the current prevalence rate of leprosy in Metro Manila is 0.81 per 1,000 population. This means, Garcia said, that of Metro Manila's six million population, about 9,876 are suffering from leprosy, of which 8,065 are active cases and 1,811 are inactive. It was found out, Garcia said, that 83 percent or 6,694 of the registered active cases in Metro Manila are local residents while 1,371 or 17 percent come from nearby towns and provinces. He said the provinces with leprosy cases and the corresponding ratio per 1,000 population are Cebu, 2,459 (1.24); Ilocos Norte, 1,935 (4.77); Ilocos Sur, 1,599 (3.79); Sulu, 694 (1.30); La Union, 679 (1.48); Palawan, 612 (1.96); Abra, 218 (1.22); and Batanes, 55 (5.24) (ETR) [Text] [Manila BULLETIN TODAY in English 17 Feb 81 p 28]

CSO: 5400

## CHOLERA FROM UNCLEAN FISHING WADIYAS

Colombo THE CEYLON DAILY NEWS in English 31 Jan 81 p 13

[Article by Edward Arambawala]

[Text] Health authorities who carried out investigations into the spread of cholera in Mannar--from which place the present outbreak originated in November 14, last year--are of the view that stricter fishing regulations have to be enforced in this region if the country is to be free of cholera in the future. [as published]

I accompanied the special health team headed by Dr. Meri Perera Acting Assistant Director Health Education, and Dr. Walter Patric Medical Officer Health Education who visited Mannar early this week to study available reports on how the disease originated, and how successful has been the control programme so far. [as published]

After careful study they confirmed the view that the disease had originated from the fishing wadiyas in Chelvathurai Mannar. Migratory fishermen from Negombo are brought to this wadiya annually by fish mudalalis for fishing during the season from November to April.

These fishermen are paid a lump sum ranging from Rs. 15,000 to Rs 20,000 per family by the mudalalis. They are provided with huts which the Health authorities say are like cattle sheds. The wadiyas are not provided with proper latrines, and drinking water facilities. In the Chelvathurai wadiya which had 80 families with about 500 members only three ill-constructed lavatories, and two unprotected shallow water holes for water supply were available.

The grown-up women used the lavatories which were nothing but covered pits and the menfolk defecated in the beach. All washing was done near the wells, and the dirty water seeped back into the wells.

Health authorities said the Government Agent leased out the beach to the fish mudalalis for the season. The Fisheries Department had no official directly responsible for ensuring that they were provided with habitable accommodation and proper and adequate water and sanitary facilities.

If one fishermen contracts a communicable disease in the wadiyas it spreads rapidly to the rest of the wadiya population owing to poor environment, water

and sanitary facilities. There are frequent visitors to the wadiyas from various parts of the country. They carry the disease to other parts and an epidemic soon breaks out.

Dr. N. Manikkam Acting Superintendent of Health Services Mannar said that this was how the present cholera disease had spread to so many parts in the country, within a matter of a few weeks. It has taken 9 lives already.

He told the special Ministry team that there was a dearth of health personnel which affected the services severely.

He said Mannar had been without a Medical Officer of Health (MOH) since July last year. It had only 7 Public Health Inspectors out of a cadre of 22. It was a humanly impossible task to serve a population of 90,000. Mannar had no Health Educator. It was not possible to carry out any health activities in the wadiyas. humanly impossible task to carry out any health activities in the wadiyas.

The Public Health personnel were also a dissatisfied lot. Since they were categorised as field officers, they were not entitled to any overtime pay. The starting basic salary of a Public Health Inspector was only Rs. 218. The chief Public Health Inspector in Mannar who had put in 30 years service was getting only Rs. 550 a month. There was no incentive for these people to work.

However, during the present cholera crisis they had all risen to the occasion, and worked hard, even foregoing meals. It was due to this that the situation had been brought under control in just under two months.

The Special Health team from Colombo paid a tribute to the hard work being done by Dr. K. Sivaraja Acting MOH, and Dr. Pathmanathan who are heading the public Health team in Mannar.

The Health team also commended the work done by volunteer health workers in Mannar in bringing the epidemic under control. They had been very helpful in home visiting, and carrying out preventive work.

The last cholera epidemic in Sri Lanka was in October 1974. That also had originated from the fishing wadiyas in Mannar and spread to Jaffna and several other coastal towns. [as published] 319 people had died in that epidemic and over 3000 people had contracted the disease.

The Health Department had declared Jaffna a diseased area than and brought the disease under control in just under three months. [as published] Compared to that outbreak the present one with 9 deaths and about 400 people affected is a mild outbreak.

The Special Health team who went to study the situation in Mannar was told by the officials that one reason for the delay in averting the disease was lack of incentives for the field staff.

The special team was shown reports of sea water tested where it was found that the beach along Chelvathurai was contaminated with the cholera germ. Over 16 per cent of the dry fish produced also had cholera germs.

Dr. Nadaraja said that the cholera germ could live in sea water for about 14 days, and in the dry fish also for the same number of days. However since no one in Sri Lanka ate raw dry fish, the sale of contaminated dry fish did not pose a danger.

The best way to prevent the spread of cholera was to teach the public to pay attention to personal cleanliness, drink boiled water and desist from eating exposed foods from wayside places.

It was the unanimous view of the doctors that with a co-ordinated effort by the Ministries of Health, Education, Fisheries, and Local Government Housing and Construction cholera could easily be eliminated.

CSO: \$400

BRIEFS

CHOLERA KILLS THREE--The Health Department reported yesterday that one cholera patient died in the Kalmunai hospital. This brings the total deaths from cholera this year to 3. One more cholera case was also reported from Jaffna yesterday. The total cholera cases for the year now stands at 66. Meanwhile, the Health Ministry will discuss the removal of the 'diseased area' regulations from Chelvathuari next week. [Text] [Colombo THE CEYLON DAILY NEWS in English 30 Jan 81 p 7]

CHOLERA IN TRINCO--Another positive case of cholera has been detected in Trincomalee. This happens to be the third case of cholera detected in Trincomalee. Of the previous two cases one patient died. The third case was found at Thirukadalur. A fourth patient has been admitted and is kept under observation. [Text] [Colombo THE CEYLON DAILY NEWS in English 4 Feb 81 p 1]

EYE DISEASE IN KALUTARA--Kalutara town is experiencing a wave of the eye-disease that, sometime back, became an epidemic throughout the country. The infection apparently spread with the reopening of schools three weeks ago. Private practitioners and the hospital at Nagoda have had several cases seeking treatment. [Text] [Colombo THE CEYLON DAILY NEWS in English 4 Feb 81 p 3]

CSO: 5400



REPORTAGE ON CHOLERA DEATH, NEW PREVENTION MEASURES

Disease Strikes Msunduzi

Mbabane THE TIMES OF SWAZILAND in English 4 Feb 81 p 1

[Text] Cholera has struck in Msunduzi where one un-named man suffering from the disease died on his way to the Mbabane Government Hospital last Saturday.

In an open public lecture on cholera at the Kwaluseni Campus of the University College of Swaziland on Monday night, Dr Ruth Tshabalala, Director of Public Health Services, said the man had shown symptoms of the disease, but had apparently refused to be taken to hospital. Dr. Tshabalala said he was eventually taken to hospital but he died on the way. He was confirmed to be a cholera case on examination at the hospital, she said.

This was the first time the incident has been mentioned officially. This incident makes Msunduzi the latest area where a cholera case has been reported since the outbreak of the disease in the country late last year.

This is also the second reported cholera death in Swaziland. Msunduzi is the biggest single location in the country and is one of the most densely populated residential areas. No further details were disclosed at the symposium.

During the symposium which was attended by students, university teaching staff and members of the general public, Dr. Tshabalala outlined the history of cholera in the country.

She stated that the disease started at Mashobeni, in the Pigg's Peak subdistrict from which it spread to other areas around Pigg's Peak but no deaths were reported.

It came closer to Mbabane when it struck at Nkoyoyo, a small settlement just outside the capital, where the first victim, an old woman, died.

"The disease spread to Mvutshini (also near Mbabane) and on Saturday it settled in Msunduzi," she said. She advised that people should not panic because the Ministry was taking appropriate action and that if suspected cases are reported immediately without delay it is easily curable.

She also warned that people should not have a false sense of security if they had been vaccinated because there was still a chance they might be infected but that they were safe as long as they listened to instructions from the Ministry.

The Ministry of Health is expected to make an official statement with details later. More details about speeches at the symposium will be published later.

#### Shots Every 6 Months

Mbabane THE TIMES OF SWAZILAND in English 5 Feb 81 p 1

[Text] Minister of Works, Power and Communications Dr. V. G. Leibrandt is today reminding the public of measures his Ministry is taking to combat any spread of cholera.

Dr. Leibrandt says that in Swaziland he believes occurrences of the disease are spread by flies and this situation is aggravated by lack of sanitary facilities in many areas.

The Ministry is therefore providing toilet slabs and these can be obtained through the Ministry of Health by those who do not have adequate toilet facilities.

Dr. Leibrandt is also advocating that everyone in the country should be vaccinated against cholera, once every six months, until the disease is controlled.

To support his theory about the transmission of cholera, he made a comparison with developed countries.

Fly transmitted cholera in developed countries has usually been controlled very soon after an outbreak, but in Africa it has progressed the length of the continent, he said.

'For instance in New Zealand we have one outbreak on record only and in UK the outbreaks have been of the same type -- one or two cases and thereafter the disease disappears.

'The reason in my opinion for this is the fact that sanitary conditions in developing countries are far below standards in those that I have just mentioned. Specifically these countries lack toilets and are infested with flies.

'Swaziland is one of the worst and if we are to halt the cholera scourage we will have to do two things, namely, build toilets and control flies," he said.

The Ministry of Works have constructed since the cholera outbreak 1,600 toilet slabs and are continuing with this toilet slab programme. Slabs are available at Matsapha PWD and are available to all through Ministry of Health. I would like to urge all persons without toilets to collect slabs from this plant, Dr. Leibrandt said.

'I would also urge the use of all measures to control flies including the use of insecticides and traps," he concluded.

## Red Alert

Mbabane THE TIMES OF SWAZILAND in English 6 Feb 81 p 1

[Text] Following the latest report of death, cholera is now threatening the lives of all the Swazi nation, and this means all of us are now in danger, says the Minister of Health, Dr. Samuel Hynd.

Briefing members of the Swazi media during an interview on cholera, Dr. Hynd yesterday morning, expressed his concern about the implications brought by the disease which has claimed another life at Msunduzi location, the biggest location in the country and the most densely populated residential area.

Dr. Hynd pointed out that as the majority of town dwellers reside in slums which have no proper control of sanitation and general hygiene they are now in a vulnerable position. The whole country, he said, is at a critical point because about 80% of the inhabitants are rural residents and they stay in places where sanitation and health teachings are almost unheard of.

The Minister related the history of this disease from when it was first reported in the Eastern Transvaal up until two days ago when it claimed another victim in Swaziland, bringing the number of people who have died from it to three.

He said that when it was first reported in Swaziland his Ministry began preparing a counter-attack by warning members of the public of its dangers and advising them of precautions to take. After the matter had been taken to Parliament and discussed the Ministry acquired cash and a large scale programme was adopted. He said that the precautions are so far proving to have worked in some instances. "This is indicated by the fact that there has been no major outbreak in the country."

Coming back to the question of slums and rural areas Dr. Hynd stressed that the Ministry of Health in conjunction with the Ministry of Works, Power and Communications are currently trying to provide clean water supplies to such locations like Nkwalini, Msunduzi and other places where hygiene is bad.

"My message to the nation therefore, is that now that the disease is completely inside the Kingdom it is endangering all our lives," the Minister emphasised.

Right now, he continued, the cholera immunisation team is heavily engaged in inoculating members of the Msunduzi community around where the latest death case was reported.

Dr. Hynd said the Ministry is investigating the best methods of putting up latrines to handle the crisis, "Unfortunately this will take some time to achieve," he warned.

"I would in such a situation appeal to members of the community to co-operate with us in trying to help." He reminded the nation to adhere strictly to the safety precautions which are published all over the country for the use of all Swazis. These precautions are the safest way to overcome this possible epidemic, he said.

There have been three deaths from cholera in Swaziland since it was first reported in Swaziland. The first fatality was a woman at Nkoyoyo, just outside Mbabane. The second was at Mkuzweni where a woman died, and the third was reported last Saturday, a man from Maunduza who died as he was being taken to hospital.

CSO: 4420

## SCHISTOSOMIASIS PREVENTION MEASURES

Blantyre DAILY TIMES in English 29 Jan 81 p 2

[Article by David Lemon]

[Text]

**(BILHARZIA, the disease which attacks the bladder and intestines, has about nine million victims in Tanzania, according to a research report which has prompted a government campaign against the disease.)**

MORE than half of Tanzania's 17 million population are suffering from schistosomiasis — commonly known as Bilharzia.

Recently the government has been mobilized to take action to bring the disease under control.

It was the Mwanza Medical Research Centre, formerly the East African Medical Research Institute, which revealed that about nine million Tanzanians were suffering from bilharzia. Its startling disclosure followed research by the centre whose findings were laid before the government at a four-day annual medical conference at the Muhimbili Medical Centre in Dar es Salaam.

The Tanzanian Government is committed to providing its people with free education, health services and the fair distribution of essential commodities, and particular stress has been put on health. But while a drive against the spread of bilharzia has been in force for some time, the centre's findings show it has been ineffective.

But the government has not been slow to act on the Mwanza centre's call for a renewed and more vigorous campaign against the disease.

"The government has agreed to recruit more research workers and although the number has not been specified, the first group of researchers will be more than six," said centre official Michael Frank. The centre currently has one malacologist, two doctors and two biochemists.

"The Government has also ordered thorough research in areas which are not covered by the centre and, as a result, a team of researchers will be leaving Mwanza for the Rufiji Valley, in the Ruvuma Region, for a two-phase research programme," said Mr. Frank.

The team will be led by the senior research officer, Dr. David Matevu and the principal medical research officer, Dr. William Rutasitara.

Mr. Frank said the Rufiji Valley was infected 100 per cent

with mansoni, one of the types of bilharzia found in the country, and that the object of examining the area was to determine the disease's impact in order to effect its control.

Bilharzia is an infectious disease which affects the bladder, intestines and pelvic organs and is caused by a parasite known as a blood-fluke.

The sufferers bleed after passing urine and the disease damages the reproductive organs and cause sterility particularly in women. Another parasite damages the large intestine, causing chronic diarrhoea, and also damages the liver and lungs.

Research by the centre has identified areas of the country affected by the disease. Mwanza alone accounts for between 32 and 60 per cent of Tanzania's urinary bilharzia victims. In the same region, intestinal bilharzia accounts for between 35 and 80 per cent. Other hard hit areas are Lindi, Mtwara, Singida, Mbeya (for urinary cases) and Kagera, Rukwa, Ruvuma and Kigoma (for intestinal bilharzia).

In conjunction with its research work, the centre has launched other measures to control the disease. "We have a loose relation with the Mwanza Regional Training Hospital and run a one-week clinic for bilhar-

zia at the Out-Patient Clinic at Sekou Toure Hospital in Mwanza. The centre conducts field training programmes at the Medical Assistants' School at the Regional Hospital in Mwanza (Bugando Hospital) and a few years back, the centre used to conduct a bi-annual course on the control of bilharzia for health inspectors from East and Central Africa. All these have been aimed at enforcing our drive against the disease up to village level," said Mr. Frank.

The centre has been carrying out research work in several fields of medicine since 1940, covering malnutrition, filariasis, ophthalmology. But in 1961, it specialised in bilharzia and hook-worm.

In 1963, the then institute was re-named the East African Medical Research Council by the Act of 1963 of the defunct East African Community. In July 1967, the Arusha Declaration confined the activities of the centre to Tanzania.

After these changes, the centre's activities have included drug trials, control experiments, the study of parasites, the control of snails, water development projects, potential tourist sites and hydro-power development projects. --APS Feature

## WHO EXPERTS TO AID EPIDEMIOLOGY, HEALTH PROGRAMS

Salisbury THE HERALD in English 22 Jan 81 p 11

[Text]

MEDICAL experts recruited by the World Health Organisation to work in Zimbabwe will start arriving in Salisbury "any time", a spokesman for the organisation said yesterday.

Dr Job Lema, the W.H.O.'s programme co-ordinator for Zimbabwe, said an epidemiologist from England and a technical field officer from Ruanda were expected in the country soon to reinforce a unit on epidemiology (the study of prevalent diseases) which the Ministry of Health had set up.

"It is a very important unit because the staff investigate the trends of diseases and the information obtained will help with the proper planning of medical services," Dr Lema said.

Many consultants were also expected to come to Zimbabwe during the year to work with Zimbabweans in the medical field.

During a visit to Zimbabwe last month the W.H.O. regional director for Africa, Dr Comlan Quenum, said he would try to mobilise technical and financial support for Zimbabwe's health programmes.

The organisation's director-general, Dr Halfdan Mahler, who was with Dr Quenum, expressed concern over the country's manpower situation.

In view of this, Dr Lema reported later, the W.H.O. would work closely with the Ministry of Health to train more health personnel and to reorientate the existing staff.

CSO: 4420



CONTROL OF MEASLES IN VICTORIA REPORTED

Salisbury THE HERALD in English 10 Feb 81 p 5

[Text] More than 94 000 children in Victoria Province had been vaccinated against measles during the past few months, the provincial Medical Officer of Health, Dr Beth Granger, said in Fort Victoria.

Outlining the progress made by her Ministry since the end of the war, Dr Granger said a supplementary feeding scheme for children aged between one and five had been started in the Ndanga District. Other areas were preparing to follow suit.

"We concentrated on a mass measles vaccination scheme and by the end of last year more than 94 000 children had been immunised. Now we are fighting malnutrition among the youngsters," Dr Granger said.

Any child whose upper arm circumference measured less than 13 cm would be considered for supplementary feeding.

Of the 25 rural clinics in the province, 10 had closed during the war but six of these had already been rebuilt and reopened. Two more would become operational when water connections had been completed.

Two of the rural hospitals had been reopened even though repairs had not been completed, but one was still closed, Dr Granger said.

Although more tuberculosis cases were being found as health teams entered previously inaccessible rural areas, the figures had not been as high as expected.

The battle against leprosy was still going on. Leprosy scouts had performed magnificently throughout the war years by taking treatment pills to sufferers in remote areas, Dr Granger said.

Turning to the central hospital in Fort Victoria, she said that all the present white staff would have left by April, with the exception of the matron, who planned to leave in June.

"But happily on the family planning side the number of acceptors in our seven districts is increasing all the time and has already topped the 30 000 mark."

Dr Granger expressed regret that in the troubled Gutu area, the Ministry's health teams had not been able to function as efficiently as she would have liked.

CSO: 5400



## INTER-AMERICAN AFFAIRS

### BRIEFS

ANTI-FOOT-AND-MOUTH MEASURES--Montevideo, 25 Feb (AFP)--Argentine, Brazilian and Uruguayan veterinary experts are preparing joint antfoot-and-mouth measures which includes a simultaneous vaccination campaign along the borders between these countries. It has been reported that the agriculture ministers of the three countries will hold a meeting on 11 March to give their support to the measures devised by the experts. [PY252215 Paris AFP in Spanish 1458 GMT 25 Feb 81 PY]

CSO: 5400

## BRIEFS

ENZOOTIC DISEASE OUTBREAK--The city of Lubango has recently registered an outbreak of an enzootic contagious disease which has already killed many birds but has not been identified as yet. This was announced in a communique from the national directorate for the organization of agricultural production. The characteristics of the disease demand the adoption of various prophylactic measures so as to prevent the spread of the disease to other localities within the province, as well as to other areas of the country. Preventive measures include the isolation of affected poultry-raising centers, and various hygiene and prophylactic measures; land and air transportation of poultry to and from Lubango was also forbidden. Moreover, it was ordered that the feet of travelers entering or leaving the province by air be disinfected. This directorate is requesting the cooperation and understanding of the population in the application of these measures which will be canceled only after the disease has been identified. [Text] [Luanda JORNAL DE ANGOLA in Portuguese 29 Aug 80 pp 1, 10]

CSO: 3400

# PRESIDENTE PRUDENTE HERD IMMUNIZED AGAINST FOOT-AND-MOUTH

Sao Paulo FOLHA DE SAO PAULO in Portuguese 5 Jan 81 p 7

[Text] Presidente Prudente--Although there were difficulties in obtaining vaccines during parts of the year, the campaign against foot-and-mouth disease conducted in the Presidente Prudente area had positive results: a report submitted by veterinarian, Dr Walter Mengato, to government organizations indicates that 90 percent of the herd has been officially vaccinated.

The official document states that, between 15 September and 15 October 1980, vaccine retailers in the Presidente Prudente area received exactly 3,132,880 doses and that, from that time on, the situation became normal. No postvaccinal reactions had been reported or observed and, during the past 4 months, no fortified vaccines from the Ministry of Agriculture have been administered.

The report adds that "almost the entire examination was made indirectly and that direct examination will be made by breeders as problems or critical situations arise." Major breeders are well informed, as indicated by the substantial number of individuals who brought a purchasing requisition for the vaccine together with a list of their cattle by age group.

There are 1,773,010 head of cattle in the Presidente Prudente area, of which only 33,911 calves were not vaccinated, being less than 4 months old. A total of 7,394 breeders have vaccinated their animals. According to laboratory verifications, 22 foci were ascertained with predominantly "A" virus.

Guards checked all traffic at border stations, and at other points only warnings were given, no fines.

In the Dira de Presidente Prudente area there are 11,981 cattle breeders who own 1,773,010 animals, including 155,471 fattened steers, 208,840 nonfattened steers, 158,642 cattle ready for slaughter, 165,815 heifers, 359,920 cows, 20,780 bulls and 181,271 bullocks.

## Parana Fights Back

A campaign against foot-and-mouth disease calling for the immunization of 1.2 million cattle in northeastern Parana is expected to be conducted without any serious problems, according to information given yesterday in Paranavai by Marco Antonio Teixeira Pinto, head of the Animal Health Division (DSA) of the Regional

Center of the Secretariat of Agriculture. The 27 vaccine retailers, spread among the 28 municipalities under the jurisdiction of the DSA, have stock amounting to 700,000 doses which will serve to immunize 50 percent of the present herd.

Teixeira Pinto advised that there will be no serious problems inasmuch as the remaining 50 percent will be forthcoming. Parana will receive 4.8 million doses of vaccine of which another 700,000 are allocated to the Paranaí area.

However, the Secretariat of Agriculture is counseling all cattle breeders to the effect that, once their herds are vaccinated, they must appear at the offices of Emater/Acarpa-Parana to show proof of the immunization, without which they will be subject to the fines stipulated in the current legislation. According to the DSA, the objective of the campaign is to avoid any outbreaks of foot-and-mouth disease among the herds of that area.

8568

CSO: 5400

COSTA RICA

BRIEFS

SWINE CHOLERA PREVENTION--In view of the swine cholera that has been discovered in some areas of Nicaragua, no pork products are permitted to enter in the northern border. Quarantine posts have been established in some places along the northern border to make sure this measure is fulfilled. Trucks coming from Nicaragua are also fumigated before being permitted to enter the country. [PA11043 San Jose Radio RELOJ in Spanish 0100 GMT 27 Jan 81]

CSO: 5400

## CATTLE HEALTH MEASURES IN RURAL DEVELOPMENT PROJECT

Addis Ababa THE ETHIOPIAN HERALD in English 29 Jan 81 pp 1, 4

[Excerpts] Woldia (EH)--The livestock sector is an important one in the economic development of Revolutionary Ethiopia. A sustained production of livestock calls for a large-scale programme for the expansion of rangelands. The Revolutionary Government has, therefore, given priority attention to the development of the country's immense potential of livestock resources.

These observations were made by Comrade [name indistinct], General Manager of the Northeastern Rangelands Development Unit (NERDU), in an interview with a group of newsmen who were touring the project area recently.

Speaking about the veterinary services, he said that animal diseases represent a major constraint to the development of the Ethiopian livestock industry. Priority concern is therefore, being attached to the intensification of veterinary services. The major parts of the veterinary services, according to the General Manager, are vaccination and treatment. As part of the effort being made to facilitate the services some 28 cratches have been constructed. Each cratch, he said, accommodates five to eight thousand of heads of cattle at a time. Six dipping vats have also been constructed to render easy the veterinary services.

Speaking to our reporter, Comrade Dr. Shimelis Olana a senior veterinarian, said that altogether there are three veterinary teams within the project. The veterinary staff in area, he said, is headed by one senior veterinarian, and consists of a junior veterinarian, animal health assistants, vaccinators and veterinary scouts drawn from the local populace. The field stations are equipped with mobile sheep dips, hand sprays, veterinary drugs and other equipments.

According to the senior veterinarian during the 1980 campaign year some 300,000 heads of cattle were vaccinated and treated. The target for the current campaign year is 500,000 heads of cattle. The vet scouts are engaged in carrying out only regular veterinary services but also in the training of the pastoralists in herd and range management techniques, Comrade Dr. Shimelis disclosed. As part of its overall effort to expand the veterinary services the project gives considerable attention to the strengthening of its co-operation with mass organizations, he observed. In the effort to expand the veterinary services the training of more and more vet scouts is a matter of urgency.

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## BRIEFS

BOVINE RABIES--The Regional Directorate of Agricultural and Livestock Production of the Agricultural Development Ministry [MIDA] is carrying out an antirabies campaign in Chiriqui Province. The campaign is being implemented through the animal sanitation department following an outbreak of bovine rabies in Eastern Chiriqui. Bovine rabies is spread by vampire bat bites, which cause anemia, malnutrition, decreased milk production and secondary infections in cattle. The MIDA's livestock department and animal sanitation section appeal to all cattlemen of the area to cooperate with MIDA technicians in capturing vampire bats, a campaign which began on 9 February. [Text] [Panama City Domestic Service in Spanish 1730 GMT 11 Feb 81 PA]

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## TRINIDAD AND TOBAGO

### BRIEFS

MYSTERY FISH DISEASE--Port-of-Spain, Trinidad, Thursday (CANA)--Local marine biologists and members of the fisheries division of the Ministry of Agriculture, Lands and Fisheries are baffled as to the cause of a disease which is affecting thousands of fish off Tobago's coast. In December, last year, these fish were washed ashore and the Ministry of Health prohibited the eating of fish caught off Tobago, until the cause of the disease was known. Investigations by the Institute of Marine Affairs have been fruitless, but analysts of specimens is being conducted. [As published] The scales of the fish have turned gold-coloured and the flesh appears purple. The Ministry of Health and local government has since given the all-clear for fish to return to the market stalls, but sales have not picked up. Almost 100,000 dollars worth of fish was thrown away when the Ministry of Health issued its prohibition notice in December. [Text] [Bridgetown ADVOCATE-NEWS in English 9 Jan 81 p 9]

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# GRASSHOPPERS DESTROYING CROP, LIVESTOCK LAND

Melbourne THE AGE in English 7 Jan 81 p 4

[Article by Ted Cavey]

[Text]

Dr Ern McIntyre kicked the bare ground which a month ago had been covered with lush pasture. "These hoppers have reduced the grass on the entire property to nothing," he said.

As Dr McIntyre walked, thousands of grasshoppers billowed out before his feet. "They're a plague down here but no-one really wants to know about it," he said.

Dr McIntyre, a former League footballer (St Kilda and Collingwood) and Sheffield Shield cricketer, has watched his 480 hectare sheep and cattle property near Stratford in East Gippsland become devastated by the grasshopper plague over two seasons.

He has had to agist his 100-plus herd of Angus stud cattle to a leased property and is now concentrating on Corriedale sheep.

"The cruel irony is that veteran farmers in this district tell me they have never seen grasshoppers down here before," Dr McIntyre said. "Coming on top of two years of drought it's enough to break your heart."

Dr McIntyre, who acts as spokesman for four nearby grazing properties also hit by the hoppers, is bitter about the Federal Government's failure to provide some form of help or compensation for the devastation.

"The local Department of Agriculture branch has tried to help but they point out that it's not within their charter to provide sprays or machinery — something that apparently could be done for locusts," Dr McIntyre said.

"But because these hoppers are said to be wingless and supposed to travel only a kilometre

a season they're not considered the same sort of threat.

"But look at this ground — the pasture we have sown is eaten beyond recovery. All the hoppers leave is the paspalum and weeds, and our fears are they will be even worse next year."

Dr McIntyre said that at great expense he had tried spraying to beat the hoppers. "It was hopeless," he said.

Dr McIntyre will continue the fight. He is trying to get the Minister for Primary Industry, Mr Nixon, himself a farmer at nearby Orbost, involved in the hopper problem and has even offered to send him a bag or two of the teeming millions.

"We hacked this property out of virgin bush," Dr McIntyre said. "We have tried to do everything right — soil tests, seed preparation, the lot. We can't let the hoppers beat us now."

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BRAZIL

BRIEFS

COFFEE RUST DISEASE--More than 350 million out of the 750 million coffee trees in Parana state have been affected by an attack of rust. IBC [Brazilian Coffee Institute] experts have begun a broad campaign in the regions of Londrina and Maringa, briefing the producers on how this plague must be fought to avoid damage to the 1982 harvest. This year's harvest will no longer be affected since the beans are already maturing. [PY171248 Sao Paulo Radio Bandeirantes Network in Portuguese 1000 GMT 17 Feb 81]

CSO: 5400

# ELEPHANTS, BIRDS, LOCUSTS REPORTED DESTROYING CROPS

Lagos DAILY TIMES in English 4 Feb 81 p 23

[Article by Usman Umar]

[Text]

**E**LEPHANTS, locusts and qualear birds have again invaded Borno State destroying vast farmlands.

The elephants, and pests invaded the Kaga Local Government areas and destroyed crops including guinea corn, millet and cow peas.

The chairman of the local government, Alhaji Mohammed Abdallah, told the state's commissioner for Agriculture, Mr. Jabani Mambulla, that as a result of the destructive activities of the animals and pests, his local council area recorded the poorest harvest ever last year.

The commissioner was in Benisheik, the headquarters of the Kaga Local Government in continuation of his familiarisation tour of the state.

Alhaji Abdullah told the commissioner that his council had earlier reported the impending destruction of farmlands to his ministry but no speedy action was taken.

He said that farmers who lost their crops were now in "a desperate situation", and therefore called on the

state government to come to their aid.

Alhaji Abdullah suggested that government's efforts to boost food production by aiding the local farmers with tractors for hiring, mixed farming season loans and fertilizer distribution should be done on time so that the beneficiaries would obtain the maximum benefit.

Replying, Mr. Mambulla said his ministry was always willing to control the menace of elephants and pests in areas where they were sited.

He observed that the Borno State Government and the Federal Government were jointly working to contain farm destruction by elephants and pests.

He said the state government had already purchased a helicopter for the spraying pest infected areas with insecticides.

This was meant to eradicate pests he said. Commissioner Mambulla then appealed to the people of the area to report promptly all cases of farm destruction to his ministry.

## BRIEFS

MINISTER ON PEST CONTROLS--A minister has reaffirmed that pest control services are of vital importance to the production of livestock as well as cash and food crops. Mr. Emmanuel Agumah, Minister of State in the Ministry of Agriculture and Rural development, told newsmen that he was in Kaduna to appraise the performance of the pest control services department of his ministry. He said the agriculture ministry merged with the division of trypanosomiasis and the crop pest unit to create the department. He said within this short period, the department had contributed tremendously in the control and eradication of animal and crop pests. Mr. Agumah pointed out to newsmen that five tsetse fly eradication centres have also been examined in Funtua; Zaria, Jos, Bauchi and Yola to cover the five cattle producing states of Kaduna, Plateau, Bauchi, Gongola and Kano. He said that the total land area reclaimed was 210,000 square kilometres, adding that traditional ground spraying system, aerial spraying by helicopter and fixed wing aircraft were in use. [Text] [Lagos DAILY TIMES in English 28 Jan 81 p 18]

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## BRIEFS

LOCUST CONTROL MEASURE--The penalty for not reporting a swarm of locusts or hoppers is to be increased to \$200, and new measures are to be introduced to ensure that swarms are reported speedily before too much damage is caused. Introducing the second reading of the Locust Control Amendment Bill, the Minister of Agriculture, Senator Denis Norman, said District Commissioners had a new role and now had neither the staff nor facilities to report swarms of locusts. For this reason a director with professional staff should be told directly so that immediate action could be taken. Mr Bill Irvine (RF, Marlborough) wanted to know how people could be expected to report the presence of a swarm on their land when they might not know about it and then be fined \$200. Senator Norman agreed that it was difficult to accuse someone of not reporting a swarm when they might not know about it. But he wanted the \$200 fine clause retained in the interest of protecting a "very vital part of our agricultural industry." The Minister said no one had been fined for not reporting a swarm and this proved how effective the existing legislation had been. The Bill was given an unopposed second reading and the committee stage was set for tomorrow. [Text] [Salisbury THE HERALD in English 4 Feb 81 p 3]

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10 March 81